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## MISCELLANY.

### TIDES AND CURRENTS.

On the hundredth anniversary of the American Philosophical Society, celebrated at Philadelphia on the 25th of May last, Mr. William C. Redfield, of New York, read to the Society, an interesting abstract of his observations respecting tides, and the prevailing currents of the ocean and atmosphere. Mr. Redfield's views on the subject are more fully developed in an able article published in the last number of Silliman's Journal of Science. Our limits confine us to the abstract of the same just published in the report of the Society's proceedings.

Mr. Redfield commenced by stating that the substance of his paper had been prepared in 1838, at the request of a gentleman attached to the United States Exploring Expedition, together with a series of maps and charts on which were delineated the predominating systems of winds and currents in different oceans, derived from the log-books of voyagers and other sources. These maps had been lost, in the wreck of the Peacock, but the general remarks and statements which had accompanied them he now submitted to the Society.

In his remarks on tides, Mr. Redfield suggested the importance of good observations on the direction of the stream of flood-tide in the *offings* of the islands and head-lands visited by the expedition, especially in positions not exposed to the local influence of banks and shallows. He also suggested the inquiry whether the great oceanic tide-wave does not perform a great revolution, on each side of the equator, in each great ocean basin, moving westward in the intertropical latitudes and returning eastward in the higher latitudes; if, indeed, this question was not deemed already settled by the inquiries of Professor Whewell.

In treating of the great oceanic currents, Mr. Redfield noticed the course of revolution in the gulf stream system of currents in the North Atlantic, and the counter revolution of the northern offset from this system, which supplies in part the great polar current that sweeps along the coasts of Labrador and Newfoundland. It has been alleged by late writers, that this polar current passes from the shores of Newfoundland to those of Europe, in coincidence with the gulf stream; but Mr. Redfield maintained that its southerly course is continued along the American coast and into the ocean depths of the Atlantic, and that at its intersection with the course of the gulf stream it becomes mainly a subaqueous current. The proofs of this he found in the impelling effects of the deep polar current upon the icebergs which it drives into the gulf stream, or even across it, unless sooner dissolved by the warm superior current from the tro-

pic, and in the reduced temperature of the more sluggish and diffused portion of the polar current, which continues its southwesterly course along the coast of the United States, to the westward of the gulf stream.

Systems of currents analogous to the foregoing, and proceeding from similar causes, Mr. Redfield described as prevailing in other oceans, but modified and controlled in their courses by the direction and contour of the continental coasts, and by the islands and extensive coral reefs of the Pacific. Thus, his inquiries had shown a warm current in the western Pacific, corresponding to the gulf stream of the Atlantic, and which had been accidentally noticed by the officers of Cook's third expedition, as running on some occasions with a velocity of five miles an hour.

After some allusions to the geological effects of the permanent systems of ocean currents, Mr. Redfield proceeded to notice the predominating currents of the atmosphere, as exhibited in the unceasing and mainly horizontal movements of the air, in circuits or systems of revolution and compensation, in the several oceanic basins of the earth's surface, on both sides of the equator. Of these systems of circulation and revolution, which bear a general resemblance to those of the ocean currents, the portions which move westwardly in the lower latitudes constitute the so called trade-winds; while the opposite winds, or counterparts of the several circuits, are found in the more gyratory and irregular winds of the temperate zones, which maintain a general movement to the eastward, that fully compensates for the westwardly flow of the trade-winds. The immediate but often unseen connection of these opposite winds in continuous parabolic or elliptic circuits, of varying forms and extent, is more conspicuous in some regions than in others, and is most clearly developed near the extreme eastern and western borders of an ocean basin; as in the region which includes the Island of Madeira and the Canaries, in which northwardly winds are found to prevail; while near the western margin of the same ocean, in like latitudes, southerly winds are most often met with, except in storms or at particular seasons.

The major axes of revolution, in these great natural circuits of wind, are generally found in those extensive belts or regions of extratropical calms and light winds, which are found in all the great oceans, and which, in the North Atlantic, are known among mariners as the "horse latitudes." A more extensive belt of calms and light winds, as is well known, generally separates the trade-winds and revolving systems of the two hemispheres, in the regions near the equator.

The generally horizontal winds of our globe, as thus developed in the great systems of circulation in

its atmosphere, Mr. Redfield had referred on some former occasions to the law of gravitation, as connected with the rotary and orbital movements of the different geographical parallels and meridians of the earth's crust; the nearest attainable equilibrium of the fluids which envelop the planet being that of motion, not of rest. But a different theory of winds has been generally adopted, founded on the alleged effects of rarefaction in the equatorial regions. Without discussing these theories, and while admitting heat as a cause and modifier of winds to some considerable extent, Mr. Redfield now alleges the following as valid and insuperable objections to the common theory of the trade-winds, viz:

1st. The specific difference of temperature in the intertropical winds, as compared with equal zones of extratropical winds, is inadequate and disproportioned to the dynamical effects exhibited in these winds.

2d. The ascent of the body of the trade-wind to the upper atmosphere in the equatorial latitudes has never been shown by observation, and may well be denied.

3d. The perpetual snow line of the Andes is found to be near 1,000 feet higher in  $16^{\circ}$  to  $18^{\circ}$  south latitude than at the equator or on the parallels of the equatorial calms.

4th. The semi-annual change in the locality of the zone of greatest heat is not productive of any like degree of change in the locality of the trade-winds.

5th. The course of the winds in extensive portions of the torrid zone appears wholly irreconcilable with the received theory.

6th. In our American summers, the hottest winds are often found moving horizontally on the earth's surface, for several successive days, but not towards the equator, nor rising from the surface, as the theory requires.

Further proof of the horizontal course of revolution in the trades and the general winds, in opposition to the calorific theory, was found in the known progress and routes of those extensive portions of the lower atmosphere which comprise the great storms, as shown by the inquiries of himself, Colonel Reid, and others. These extensive portions of atmosphere cannot be supposed to possess any self-moving power or tendency other than gravitation, but must move in accordance with the predominating physical impulse to which the lower atmosphere is subject in the regions through which the storm may pass.

The rotation of these storms, also, in a determinate direction, proves the generally horizontal course of the winds on the earth's surface, and the dynamical influences of the earth's rotation on the atmosphere; for it can be shown by an experiment which Mr. R. pointed out, that a tendency to gyrate from right to left in the northern hemisphere, and in the counter direction in the southern, is necessarily imparted to the surface winds, which move from the equator towards the temperate latitudes, in the great circuits of revolution which he had ascribed to the trades and to the general winds.

**A CHINESE MUSTER.**—A note appended by the French Translator to a work of a late Russian Consul, on China, contains a description of a great review of the Chinese army, which took place in the plain of Yan-chen-va, a league and a half southeast of the city.

This account is given by M. Leontieff, who resided for a long time at Pekin.

We set out, says he, at two hours past midnight, and were drawn over the frozen mud in the streets without meeting a living soul. The watchmen only, seated in their boxes, lighted by small lamps, struck their staffs on hearing the sound of our carriage.

The soldiers going in single file and the officers in *tche*, (*cabriolets*) were proceeding to the place of the review. Some soldiers had bows and arrows in their hands, others carried on their shoulders very small guns, and others, who went probably only to increase the number, had no arms at all. At the gate of the city, which was only half open, the guard examined by the aid of paper lanterns those who presented themselves to go out. In this way we passed through the narrow streets which led to the plain of Yanchen. In this open plain was a long file extending from east to west of great lanterns, on which were hung leaves of red paper bearing the inscriptions which indicated the names of the divisions there assembled. These lanterns were suspended on poles before each division, beginning from the east at the division of the red flag. The soldiers, who were pressing about the lanterns, appeared occupied in assembling and arranging themselves according to their rank. Our carriage stopped at the west of a mound on which was a great blue tent, turned towards the south. At the east and west of this tent were great lanterns hung on long poles serving to give light to the tent; at the southeast and west, smaller tents had been arranged for the military chiefs.

After having examined what was passing on this hill, we went towards the troops, and we had not gone more than a hundred paces when we approached the cannon. I was curious to examine these pieces, as at present there is no one in the Chinese empire capable of casting them, and the Chinese artillery (if it deserve this pompous name) employs pieces taken from the Dutch in Little Bucharria, or rather those which were made under the direction of the missionaries more than a century ago. I examined them and saw that they were mounted on wooden four wheeled carriages, and fastened by cords full of knots. I passed to other pieces, and my surprise was increased on seeing that the carriages were only kept together by ropes tied about them. The iron and bronze cannon were not more than ten decimetres long; they were placed on the high ground before mentioned. Three of these pieces were prepared for firing, and the others placed beside them were hidden by old matting. Was this to conceal their miserable condition, or only to protect them from the dampness? I leave others to judge. I did not dare to prolong my examination, for fear of awakening suspicion. There were also large kettle drums, each carried by four men on sticks disposed like a cross.



The soldiers then began to place themselves in rows before the blue cloth tents destined for the officers.

I returned to my carriage and awaited the arrival of the officers. In the east, the heavens began to grow pale, the moon became dim, and, inclining towards the west, finally disappeared. The lanterns before the lines were all taken down and extinguished. At last the persons appointed by the Emperor to inspect the troops, arrived in palanquins, and entered the tent which was on the hill. The troops were then arranged in three very long lines, extending from east to west. The three cannon mentioned above, were each discharged in succession. The recital I am about to make, will, I think, create surprise.

To load a cannon they put in a certain quantity of *da-yao*, (a coarse powder composed principally of charcoal, mixed with small portions of nitre and sulphur.) They fill up the touch-hole with a finer powder, in which nitre predominates; they set fire to it with a match of twisted paper. The fire having reached the charge, the *da-yao* begins to crackle; the cannon moves back and forward, and a minute elapses before it goes off. I was not an eye witness of what I have related, but I was told so by the cannoniers themselves. The cannon exercise was succeeded by gun-firing. About a twentieth part of the men only fired, beginning in the middle of the ranks, and finishing at the extremes. Every row fired in turn, first making a movement forward to the disorderly sound of the drums before mentioned. This sort of fusillade was repeated six times. After this, each rank effected a retrograde movement, accompanied by a fusillade like the preceding, and regained its former position. Then began a general firing, in which the soldiers of the back ranks discharged their pieces in the air, that they might not wound their comrades, and for fear too that the charges should fall to the ground; for the Chinese do not ram down their charges, not making use of ramrods. In this way the infantry, to the number of 20,000 men, terminated its evolutions.

During the exercise, the cavalry, officers and men, were assembled at the right and left of the hill near the principal flags ranged like small arcs of a circle. This cavalry, at a signal given by the music, went over to the opposite sides in the most complete disorder. Those who had good horses went first, those who were badly mounted followed as they could. This movement terminated the review, after which the commanders, officers and simple soldiers, dispersed without observing any order. Those soldiers who had guns, wore blue nankin coats, bordered with white. This costume distinguished them from the others, who being without arms, were only kept in the ranks to swell the numbers.

By gun, must be understood a thick cylinder of iron seven or eight inches long, blackened by neglect, and fastened to a wooden gun, without a ramrod or lock. This last part of the weapon is replaced by a crooked iron rod, the end of which is forked to receive a paper match soaked in saltpetre, with which the powder, placed on the open pan, is lighted.

**PRESENT ARMS TO THE DUKE.**—Some few years ago the New York Mirror contained a sketch entitled "Higher yet," which had a wide circulation at the time. Like all other popular and meritorious literary productions, whether in prose or verse, it excited the envy of some and the rivalry of others. Among the many things written in imitation of it, is the following, which is excellent in its way: One of the heaviest of the heavy German soldiers had the duty of mounting guard at one of the ducal hunting-seats; and, not to perplex the poor fellow, one single notion, and no more, was rammed into his noddle, namely, that he must present arms to the Duke, should his highness pass that way. He was then left to his cogitations, which, we need hardly say, were of that class described by Dibdin in his song, who, we are told, "was thinking of nothing at all." Tired of this transcendental monotony, the man had recourse to the universal German solace—his sausage and his schnaps. The better to enjoy these, he laid his firelock on the grass, and lolling against a tree, discussed his creature comforts with due voracity. While thus engaged, he saw an unpretending person approach, dressed in the common German hunting dress, a sort of green smock frock, leathers, and continuations.

"Good appetite to you!" said the new comer. "What are you eating?" "Guess," gruffly answered the peasant soldier. "Oh! perhaps Rothwurst?" said the Duke, (for the sportsman was no less a personage.) "No, something better than that." "Probably Leburwurst?" "No, something better than that." "Probably Mettwurst." Rothwurst, Leburwurst, and Mettwurst, may be called the positive, comparative, and superlative degrees of the German sausage. "Yes. And now you know all about my sausage, pray who are you?" "Guess," said the Duke. "Oh, perhaps you're one of the Duke's pages?" "No, something better than that." "Then you may be one of his aides-de-camp in disguise?" "No, something better than that." "Perhaps you're the Duke himself?" "Yes." "Indeed, you are! Just hold my sausage a moment—for my orders are to present arms to you." The Duke always related this anecdote with infinite glee.

**TROPHIES OF GLORIOUS WAR.**—The statistics of Greenwich Hospital present the following items and sum total:

Now in Greenwich Hospital, 2,700 pensioners; of whom there are, loss of right arms, 14; left do. 9; total 23. Loss of both legs, 3; right do. 35; left do. 33; total 71. Loss of both eyes, 52; right do. 46; left ditto, 50; total, 148. Ruptured both sides, 177; ditto, right side, 194; ditto left side, 147; umbilical, 7; total, 525. Total maimed and ruptured, 767. The above does not include any of those suffering from distortions, contractions, fractures, dislocations, or wounds, not having required amputation.

**CAPE OF GOOD HOPE.**—Cape of Good Hope papers to July 2, state that Col. Cloete has announced to the Boers in the vicinity of Port Natal, the determination of the British Government to adopt Natal as a British colony, and to place it under British rule.

### Communication.

#### NOTES ON FOREIGN MILITARY SCHOOLS AND ARMY ORGANIZATIONS, IN THE YEAR 1840.—Continued from page 509.

COLLECTED BY AN OFFICER OF THE U. S. ARMY.

#### ARMY ORGANIZATIONS.

##### I. FRANCE.

The present military organization of France is very complete. It is the result of long experience, and probably is the best and most perfect of any in Europe. Indeed most other European Governments have already adopted the principles of the French organization in their own armies.

The King is the commander-in-chief of the entire military forces. His orders are communicated through the Minister of War. This minister is assisted in his duties by a military aid, and a military staff of seven or eight officers selected from the several corps of the army. The War Office (*cabinet du ministre*) is also under the direction of a military chief. There are twenty-seven bureaux connected with the War Office:

The bureau of the—*Secrétariat General*,  
 Interior Service,  
 Laws and Archives,  
 Contrôle of Expenses, &c.,  
 Fonds and Ordinances.,  
 L'Agence comptable du Ministre,  
 Pensions,  
 Invalids, &c.,  
 Engineers,  
 Artillery,  
 Staff, and Military Schools,  
 Infantry,  
 Gendarmerie,  
 Cavalry,  
 General Remonte,  
 Recruiting,  
 Military Justice,  
 Military Operations and the Movement of  
 Troops,  
 General Correspondence and of Decorations,  
 Military Intendence,  
 Pay and Muster,  
 Clothing, &c.,  
 Subsistence, &c.,  
 Hospitals,  
 Transportation, Convoys, &c.,  
 And two bureaux on the Affairs of Algeria.

The *Depôt de la Guerre* is under the direction of a lieutenant general. It is divided into five sections, and each section presided over by a field officer.

The *Staff Commission* (*commission d'état major*) is composed of a lieutenant general as president, and seven field officers of the staff. It directs the studies of the officers and pupils of the staff, and examines candidates for admission to the staff or the school of application. It assembles once in each year.

The *Consultatif Comité of Fortifications* is composed of nine members chosen from the lieutenant generals and *maréchaux-de-camp*.

The *Consultatif Comité of Artillery* is made up in precisely the same way.

The *Consultatif Comité of Infantry and Cavalry* is composed of fifteen members, viz: six lieutenant-generals of infantry, and four of cavalry; three *maréchaux-de-camp* of the staff, the infantry, and the cavalry; and two military intendants.

The *General Staff of the Army* consists of the marshals of France and general officers. By the law of August 4, 1839, the number of marshals of France is limited to six in time of peace, and twelve in time of war. The same law divides the general officers into two sections; the first including the active and disposable officers, and the second, the reserve. The first section, in time of peace, is composed of eighty lieutenant-generals, and one hundred and sixty *maréchaux de-camp*. All general officers are enrolled in the second section as soon as they cease to belong to the first. According to the *Annuaire* of 1840, this second section was composed of forty-nine lieutenant-generals, and sixty seven *maréchaux-de-camp*. The number of general officers on the retired list was eighty lieutenant generals, and two hundred and fifteen *maréchaux-de-camp*.

The officers attached as aids, &c., to the King and Royal Family, are selected from the several corps of the army. The number is thirty-four, of which twenty-one are attached to the King. There are three commandants and three adjutants of the palaces of the Tuilleries and St. Cloud. The former are field officers, and the latter subalterns.

The *Royal Staff Corps*, as finally modified by the ordinance of February 23, 1833, is composed of five hundred and sixty officers, viz: thirty colonels, thirty lieutenant colonels, one hundred *chefs-d'esquadron*, three hundred captains, and one hundred lieutenants.

The *Corps of "Intendence Militaire"* was created by the ordinance of July, 1817. According to the organization established in June, 1835, it consists of two hundred and twenty-five members, viz: twenty-five "*Intendants Militaires*," and one hundred and fifty "*sous-intendants*," and fifty "*adjutants*."

The military territorial divisions of France are twenty-one, each division being composed of several departments. The officers of general staff and of the *intendence militaire*, are assigned to these several divisions.

The officers of the garrison staff (*états-major des places*) are two hundred and seventy in number, viz: one hundred and seven commandants, nine majors, one hundred and twelve adjutants, thirty-seven secretary-archivists, and five chaplains.

We do not include in either of these enumerations, the military organization of Algeria, which is distinct from all the others. We now pass to the several special corps of the army.

*Corps of Engineers*, ("*Corps du Genie*")—This corps is composed of a staff, three regiments, one company of workmen, and one company of veterans. The staff is composed of twelve general officers, four hundred staff officers, nine professors of regimental schools, one examiner of pupils, the engineer pupils, and five hundred and six engineer guards and *ouvriers d'état*. The officers of the staff are chosen exclusively from the graduates of the Metz School of



application. The number of graduates of the Polytechnic School which are sent to Metz each year as engineer pupils, are presumed sufficient to fill the vacancies in this corps. These pursue the course of instruction at the school, and, on passing a satisfactory examination, receive the rank of second lieutenants in the regiments. There are exceptions to this arrangement. Some officers are sent directly to the school of application, on passing an examination on this programme of studies for admission. The engineer guards are selected from the sub-officers of the engineer troops. They are five hundred in number. The six *ouvriers d'état* are appointed by the Minister of War.

Each engineer regiment is divided into two battalions, one company *hors rang*, ———, and one company of the train. Each of the two battalions in the regiment is divided into seven companies of sappers and one company of miners. In time of war there will be formed a depot of two *cadres de compagnie par regiment*. The regimental organization is as follows: one colonel, one lieutenant colonel, two *chefs-de-bataillon*, one major, two *capitaines-adjutant-major*, one treasurer,\* one assistant treasurer,\* one clothing officer,\* one surgeon and two assistant surgeons, one commandant (a *chef-de-bataillon*) and one assistant commandant (a captain) of the regimental school, one professor of mathematics, one professor of drawing, and one professor of writing and grammar, sixteen first captains, sixteen second captains, sixteen first and sixteen second lieutenants.

The following is the organization of the company of artificers: one first and one second captain, one first and one second lieutenant, one sergeant major, six sergeants, one *fourrier*, eight corporals, four master workmen, eighty soldiers, and two drummers; making in all four officers, and one hundred and two non-commissioned officers and soldiers. In time of war they receive an addition of eight non-commissioned officers and forty soldiers.

The organization of the *compagnie hors rang* is as follows: one commandant, one adjutant, twenty-nine musicians, one sergeant major, seven sergeants, one *fourrier*, eight corporals, and fifty soldiers.

The composition of the company of the train is as follows: one captain, one first and one second lieutenant, five *maréchaux-des-logis*, six *brigadiers*, one hundred and three soldiers, one *vétérinaire*, two *maréchaux-ferrans*, two *bourelriers*, and two trumpeters. The whole number of horses is two hundred and seven. In time of peace, the number of soldiers is reduced to thirty, and the non-commissioned officers to twelve. The whole number of horses is then only eighteen.

The composition of a *cadre de compagnie de dépôt* is: one first and one second captain, one first and one second lieutenant, one sergeant major, four sergeants, one *fourrier*, four corporals, and two drummers.

A company of *vétérans* is composed of one first and one second captain, one first and one second lieutenant, one sergeant major, six sergeants, one *fourrier*,

twelve corporals, one hundred and twelve veterans, and two drummers.

A company of *sappers* or *miners* is composed of one first and one second captain, one first and one second lieutenant, one sergeant major, eight sergeants, one *fourrier*, twelve corporals, six master workmen, one hundred and twenty privates, and two drummers. In time of peace there is a reduction of two sergeants, four corporals, two master workmen, and forty privates. The staff of sappers and miners is composed of twelve officers and sixteen non-commissioned officers and privates. The officers are one colonel, one lieutenant colonel, two *chefs-de-bataillon*, one major, two *adjutants-major*, one treasurer, one clothing officer, one chaplain, one surgeon, and one assistant surgeon.

The engineer troops must be strong, well made, and at least six feet two inches high. They are selected: five-thirtieths from workers in wood, three-thirtieths from workers in stone, two-thirtieths from workers in iron, twenty-thirtieths from workers of the soil, (*terrassiers*.) The men in the company of artificers are taken: five-eighths from workers in iron, and three-eighths from workers in wood. No one can be received into the company of veterans till he has served a certain length of time. The whole effective force of engineers, on the war footing, is: 269 officers, 8,076 non-commissioned officers and privates, and 813 horses. In time of peace the number of officers is reduced to 242, the troops to 5,412, and the horses to 48. Two-thirds of the vacancies of officers in this corps must be filled by the graduates of the Metz School; the other third are filled by the non-commissioned officers of sappers and miners. These are previously instructed in the regimental schools. No one is therefore allowed to enter this corps as an officer without a previous course of discipline and study. Hence its high character and reputation.

In time of peace the duties of this corps consist in planning and constructing civil and military works for Government, procuring and verifying the titles to public lands, &c., and repairing and superintending the fortifications and military structures. The commanding engineer officer at each post or fort usually has under his direction one or more of the engineer guards, fort-keepers, and artificers. These officers "are subject," according to regulations, (arts. 14, 15,) "only to the direct orders of their own chief, the director of fortifications, who transmits to them, besides his own orders, those of the Minister of War." "They ought not, however, to refuse to assist, to the best of their ability, in the execution of the orders of the Minister of War sent directly to the military intendants and sub-intendants, when these officers give them an official notification. These military officers are bound in the same way to contribute to the execution of the Minister's orders to the engineer officers." But officers of neither corps are subject to the direct orders of those of the other. This division of labor in time of peace is found not only beneficial, but necessary, for the good of the service. Engineer officers, especially, are charged with duties entirely distinct from those of the other corps, and for which a peculiar education and a higher degree of scientific

\* Captains and lieutenants acting in these capacities.

attainment are required. To make them subject, therefore, to the orders of the officers of the line of the army, (let their rank be what it may,) who are not supposed to be acquainted with these duties, would render nugatory the benefits of separate organizations and of distinctions in the required qualifications of corps.

These engineer officers, however, have certain duties and relations to the others which they are bound to perform: they must give all desired information respecting the service of fortifications and quartering of troops to the inspectors and generals of territorial divisions; are connected with the commandants of posts, so far as relates to the security of the place and the barracking of soldiers; with the sub-intendants, in all that relates to marches, quartering, &c.; with the commandant of artillery for the remittance of supplies of powder, &c.; with the civil engineers (*des ponts et chaussées*) with respect to the works executed by these officers in the frontier zone; with the mayors of municipalities, &c., &c. The engineer officers must give information to the commanding general of division of the decisions of the Minister of War on all operations respecting the defence and security of places, such as the construction of new works, changes in the old works, alterations of the armaments, &c.; the commandant of the place must also be informed of the time when these operations are to begin. When the ranking engineer officer of a post absents himself from that post he is only obliged to notify the commandant of the post by designating to him who is to supply his place in his absence. When the engineer officer gives leave of absence to one of his subordinates, notice of this must also be given as before; he is responsible for these absences to the Director of Fortifications only.

In time of war the engineer officers attached to an army in the field are charged with the works of permanent fortifications, of attack and defence, of reconnoissances connected with these works; of such works of field fortifications as may be directed by generals of army or division, such as epaulements, forts, trenches, redoubts, block-houses, bridge-heads, lines, retrenched camps, dikes, &c.; of works connected with marches, such as the opening of passes, the construction, destruction, or rebuilding of roads, bridges, &c., &c. They are subject to the orders of the general of the army, corps d'armée, or division to which they are attached, and they constitute a part of his staff; they must communicate to him all orders they may have received from their own general or superior officers. This distinction between the military relations of officers in peace and in war, is founded on the principle that, although there must be a division of duties and labor, distinct and well understood, there must be one commandant of all who belong to that particular command.

*Royal Corps of Artillery (Corps Royal de l'Artillerie).*—The organization of this corps may be found in ordinances of August 5th, 1829, and September 18th, 1833. The officers of the staff and troops, as given in the "Annuaire" of 1840, are: 7 lieutenant-generals; 14 *maréchaux-de-camp*; 47 colonels; 47

lieutenant-colonels; 135 *chefs-d'escadron*; 342 first captains; 269 second captains; 214 first lieutenants; 154 second lieutenants; and 57 *sous-lieutenants*.

There are in all 14 regiments of artillery. The regimental staff consists of 1 colonel, 1 lieutenant-colonel, 6 *chefs-d'escadron*, 1 major, 2 adjutants-major, 1 instructor of equitation, 1 clothing officer, 1 treasurer, 1 adjunct treasurer, 2 lieutenants assistants, 1 surgeon, and two assistant surgeons. The officers of the batteries of a regiment consist of 13 first captains, and 13 second captains, 13 first lieutenants, and 13 second or sub-lieutenants, and an officer of each of these four grades for *cadres-de-dépôt*. There are 12 companies of artillery artificers, each having 2 captains and 2 lieutenants. The officers of the train of the artillery parks consist of 1 lieutenant-colonel, 5 *chefs-d'escadron*, 24 captains, 18 lieutenants, and 19 *sous-lieutenants*. This train is divided into 6 squadrons, forming the schools of Strasbourg, Toulouse, Metz, Besançon, Rennes, and Douai. The staff of a squadron is composed of the *chef-d'escadron*, 1 captain-major, 1 captain adjutant-major, 1 captain of clothing, 1 captain treasurer, and 1 surgeon. The several companies are commanded by the lieutenants and *sous-lieutenants*.

The great central artillery *dépôt* is at Paris; also the *Atelier de précision*, the artillery museum, and library; each in charge of an officer. There are 9 schools of artillery, one at Laferre, one at Vincennes, and one at Lyons, in addition to the six already given. There are 8 artillery arsenals, 3 foundries, 6 forges, 4 manufactories of arms, 11 powder manufactories, and 7 refineries of saltpetre, each under the direction of an artillery officer.

The duties of this corps comprise those of the artillery proper, and also those which in our own and some other services are assigned to an ordnance corps. It is in this latter capacity that the royal corps of French artillery has gained its scientific reputation.

*The Battalion of Pontonniers, (Bataillon de Pontonniers),* is established at Strasbourg. Its staff consists of a lieutenant-colonel commandant, 2 *chefs-de-bataillon*, 1 major, 2 *adjutants-major*, 1 *officier d'habillement*, 1 treasurer, 1 surgeon-major, and 2 assistants. Its company officers are, 12 captains-commandant, 12 second captains, 12 first, and 12 second and sub-lieutenants.

*The Battalion of Artificers, (Bataillon d'Ouvriers d'Administration),* was organized in 1830; this organization has since been somewhat changed by the ordinances of September 14th, 1831, and March 12th, 1834. This battalion consists of a staff, and 6 companies, exclusive of the *compagnie du dépôt*. The staff is composed of 1 *chef de bataillon commandant*, 1 adjutant-major, 1 treasurer, 1 *officier d'habillement*, and surgeon. Each company consists of 1 captain, 1 first and 1 second lieutenant. The depot company is stationed at Troyes, the 1st company at Paris, Strasbourg, Lille, and Metz; the 2d at Oran; the 3d in Algeria; the 4th at Lyons, Perpignan, Toulon, Montpellier and Bayonne; the 5th at Bone, Constantine and Philippeville; and the 6th at Alger, &c., in Algeria.



*The Corps of the Train, (Corps du Train des Equipages Militaires,)* was organized by the ordinance of November 10th, 1830. Connected with this is the *Direction of the Parks of Construction*. The staff of this Direction is composed of 1 colonel, (who is the director of the parks, and also commandant of the corps of the train,) and 2 captains. There are two parks of construction, one of repairs, and a depot. The first park of construction is at Vernon, and is officered by 1 captain, 2 lieutenants, and an assistant surgeon. The second is at Châteauroux, and officered by 1 chef.d'esquadron, 1 captain, 2 lieutenants and 1 assistant surgeon. The park of repairs is at Alger, under the direction of a captain and 2 lieutenants. The depot is at Sampigny, under the direction of a captain. The staff of the corps of the train is composed of 2 chefs d'esquadron, 1 major, 3 captains, 2 lieutenants, 1 surgeon-major, and 2 assistant surgeons. There are 10 companies in this corps, 6 of which, and 4 detachments of the provision trains, are in Africa. There are also 3 companies of artificers connected with this corps. Each company of the train has 1 captain, 2 first and 2 second lieutenants; each company of artificers has 2 captains, 2 first, and 2 second lieutenants. The whole number of captains belonging to this arm is 23.

*The Infantry*, is divided into infantry of the line, and light infantry. The first is composed of 67 regiments, and each regiment is divided into 3 battalions. The regimental staff consists of 1 colonel, 1 lieutenant-colonel, 3 chefs-de-bataillon, 5 captains, 3 lieutenants, 1 surgeon-major, and two assistant surgeons. The company officers of the regiment are 24 captains, 24 first, and from 26 to 28 second lieutenants. There are 21 regiments, each 3 battalions of light infantry. These regiments are officered in the same manner as the regiments of the line. A body of African light infantry was organized in 1836. It consists of 3 battalions. The staff of each battalion is composed of 1 chief, 4 captains, 1 lieutenant, 1 surgeon-major, and 1 assistant surgeon. The company officers of a battalion are 10 captains, 10 first and 11 second lieutenants. A battalion of *Tirailleurs* was organized in 1839, consisting of 6 companies, with 1 captain, 1 first, and 1 second lieutenant to each company. The staff of this battalion is composed of 1 chief, 2 captains, 2 lieutenants, and 1 assistant surgeon. The foreign legion (*Légion Etrangère*) was established in 1835. Its staff is composed of 1 colonel, 1 lieutenant-colonel, 4 chefs-de-bataillon, 1 major, 6 captains, 1 lieutenant, 1 surgeon-major, and 3 assistant surgeons. The other officers of the legion are 32 captains, 30 first, and 28 second lieutenants. The 12 companies of discipline were established in 1818. 8 of these are fusiliers and 4 pioniers. Each company has 1 captain, 1 first, and one second lieutenant. The whole number of infantry officers above the grade of lieutenant, in active service, is 3102, viz: 92 colonels, 89 lieutenant-colonels, 350 chefs-de-bataillon, and 2571 captains. Besides these, there are on special duty 4 colonels, 2 lieutenant-colonels, 1 chef-de-bataillon, and 14 captains.

For further details of the infantry, vide the ordinances of February 27th, 1825, and May 7th, 1831. It is unnecessary to give the details of company organization, and the duties of particular officers of artillery, infantry, and cavalry, as the tactics of these three arms of our own service are about literal translations of the French systems.

*The Cavalry* is divided into the cavalry of reserve, the cavalry of the line, and light cavalry. The first is composed of *carabiniers* and *curassiers*; the second, of *dragons* and *lanciers*; and the third, of *chasseurs*, *hussards*, and *African chasseurs*.

There are 3 regiments of carabiniers, and 10 of curassiers. The regimental staff is composed of 1 colonel, 1 lieutenant-colonel, 2 chefs.d'esquadron, 1 major, 6 captains, 2 lieutenants, 1 surgeon-major, and 1 assistant surgeon. The other officers of a regiment are 10 captains, 10 first, and about 12 second lieutenants. There are 12 regiments of dragons, and 8 of lancers. They are organized in nearly the same manner as the cavalry of reserve. There are 12 regiments of chasseurs, 6 of hussars, and 4 of African chasseurs. The number of staff and other officers in the latter corps is considerably greater than in the others. The regular *spahis* are divided into 2 corps, 4 squadrons each. The officers are partly indigenous. The staff of each corps is composed of 1 lieutenant-colonel, 1 chef.d'escadron, 2 captains, 1 lieutenant, 1 surgeon-major, and 1 assistant surgeon. The other officers of a corps are, 4 captains, 8 first, and 10 or 12 second lieutenants. There are in active service in the cavalry 56 colonels, 56 lieutenant-colonels, 175 chefs.d'escadron, and 839 captains. On special duty, 2 colonels, 3 lieutenant-colonels, 9 chefs.d'escadron, and 20 captains.

We add here the organization of the *Subsistence, Clothing, and Health Departments*, though, we believe, their officers hold no military rank. The whole number of subsistence officers is 298, viz: 12 principals, 136 *adjudans*, (in 2 classes,) and 150 *comptables*, (also in 2 classes.) In the clothing department there are 4 principals, 20 *comptables*, and 54 *adjudans*. The health department is composed of 87 doctors, 1021 surgeons, 95 pharmaciens, and a considerable number of hospital directors and attendants.

*The French Gendarmerie*, is composed of 24 legions for service in the several departments; 2 colonial companies; 1 legion for service in Algeria; the municipal guard of Paris; and a battalion of voltigeurs. This corps contains 21 colonels, 6 lieutenant colonels, 4 chefs.d'escadron, 143 captains, 439 lieutenants, and 88 sous-lieutenants.

*The Sappeurs-Pompéers de Paris*, are divided into a general staff and 4 companies. The whole number of officers of this corps is 15.

*The Veterans of the French Army* have a military organization. There is a large general staff of veterans, 1 company of engineer veterans, 13 companies of cannoniers, 4 companies of cavaliers, 16 companies of fusiliers, 10 companies of non-commissioned officers, and 2 companies of gendarmes.

*Recruits.*—Depots are established in each depart-

ment for recruits and the reserve, 4 officers being employed at a depot. The lieutenants and sub-lieutenants are simply *detached* from their regiments and corps, but the captains and superior officers on this duty are no longer counted in the corps to which they belonged. The number of officers on this service in 1840 was 86.

**Rank, Pay, &c.**—Rank in the French service is usually the reward of merit and it is not unfrequently that we find many young and enterprising officers at the heads of regiments and corps. The results from the system of promotion. Up to the rank of major, only one-third of the promotions are by seniority of rank, and above that grade, merit is the only claim that can be urged. A certain proportion of the appointments are always made from the non-commissioned officers; but those appointed in this manner to be military officers in the engineers are never permitted to raise above this grade in the corps; they can receive no appointment in the engineer staff, or engage in the construction of fortifications. Their duties are therefore of a strictly military character, and entirely separated from the scientific occupations of the corps.

In pay, this corps also ranks the highest. The relative pay and allowances in the several corps (including all grades) is represented by the following numbers: For engineers, 652; for artillery, 572; for cavalry, 561; and for infantry, 421.

The honors bestowed upon the officers of the French army have always been a strong incitement to deeds of heroism. The following is the royal order of the legion of honor: 1st. Grand Cross; 2d. Grand Officer; 3d. Commander; 4th. Officer; and 5th. Chevalier.

The retired list in the French army is pretty large. It is not altogether at the option of the officer to go into military retirement, the Government having reserved to itself the power of placing on the retired lists those it deems unfit for active service. France provides well for her veterans by pensions and support in the military hospital. The whole number of pensioners in the Hotel des Invalides in 1840, exceeded 3,000; the average annual admissions amount to about 200.

**Military Jurisprudence.**—The laws relating to this subject are those of November 3, 1796, November 8, 1797, February 16, 1807, and February 3, 1813. There are two permanent councils of war and one council of revision for each military territorial division, and for each active army. There are twenty-one of these divisions in France, and three active armies in Africa, making in all eighty-two permanent councils or courts. The council of war is composed of one colonel as president, one chef-de-bataillon or d'escadron, two captains, one lieutenant, one sub-lieutenant, and one non-commissioned officer, as judges. There are also a reporter and a commissioner of the King, (both captains,) and a clerk, chosen by the reporter. This court or council takes cognizance of all crimes and military offences. The permanent council of revision is composed of one colonel, one chef-de-bataillon or d'escadron, two captains, and a royal commissioner. The clerk is chosen by

the president. This council revises the proceedings of the council of war, and determines whether they are in accordance with law. The members of these councils must belong to the active army, and are nominated by the commanding generals of divisions or active armies. They are replaced from time to time by new ones.

There are three establishments (*ateliers*) for the punishment of soldiers condemned to the ball and chain, and four for those condemned to the public works. There are also fifty-seven military prisons, or civil prisons, where soldiers are admitted for punishment.

**Numbers, &c.**—The several elements of military force in France are: 1st, the active army; 2d, the movable national guard; and 3d, the sedentary national guard. The military population includes all sound males between the ages of eighteen and fifty years; the statistical elements of the active army include all sound males between twenty and twenty-nine years; of the movable national guards, all between eighteen and thirty-five years who are not enrolled in the active army; all others under the age of fifty are classed in the sedentary national guards.

The following table gives the numbers and expenses of pay and support of the French army, from the budget of 1840.

<i>Effective force maintained.</i>		<i>Expenses in pay and support.</i>
Staff and employés,	3,867	15,377,803 francs.
Gendarmerie, . . .	15,620	13,192,185 "
Infantry, . . . . .	210,780	89,903,657 "
Cavalry, . . . . .	44,319	23,899,518 "
Artillery, . . . . .	25,532	14,618,725 "
Engineers, . . . . .	5,072	3,306,984 "
Military equipages,	2,214	1,279,866 "
Veterans, . . . . .	5,382	2,314,602 "
Foreign corps, . . .	2,993	1,307,598 "
Men, . . . . .	315,781	165,230,938 "
Horses, . . . . .	64,107	31,620,548 "
Other expenses, . . .		45,335,315 "
Total, . . . . .		242,186,801 "

We add here the strength of the principal armies of France during the wars of the Revolution.

In 1791–2 the active army amounted to a little more than 200,000 men.

The French forces, in the campaign of 1793 amounted to 270,000. They were opposed by 365,000 men in the allied armies.

In 1794 France had an army of 700,000 men ready for the field.

The active force of the French armies in 1795 amounted to 450,000, and the effective force, including garrisons, to 959,000 men.

In 1796, army of Moreau, . . .	77,650
" " Sambre-et-Meuse, . . .	74,500
" " Rhine-et-Moselle, . . .	65,000
" " Italy, . . . . .	54,000
In 1799, army of the Danube, . . .	36,000
" " Italy, . . . . .	116,800
" " the East, . . . . .	35,000
In 1800, army of Italy, . . . . .	36,000
" " the Rhine, . . . . .	128,000
" " Reserve, . . . . .	50,000



In 1805, in the campaign of Austerlitz, Napoleon's army amounted to 180,000 men.

In 1806, in the campaigns of Jena and Eylau, Napoleon's army amounted to about 150 000 men.

In 1807 the grand army numbered over 200,000.

In the campaigns of 1809, the French army in Germany amounted to over 300,000 men.

In 1812, the entire military force commanded by Napoleon amounted to 120,000 men. Of these 300,000 were engaged in the Spanish wars, and 647,158 entered Russia.

The nominal military force of the Empire in 1813, was over 990,000 men, add Napoleon's army collected on the banks of the Elbe, numbered above 200,000.

In 1814, the entire force amounted to 380,000 men, but not more than 200,000 could be brought into the field. These were opposed by the allies with 1,028,000 men.

The army of Napoleon in Belgium, in 1815, amounted to 120,000 combatants. The whole number of French troops at this time, including all the armies, amounted to about 550,000. The forces of the allies probably exceeded 900,000 combatants in the field.

**THE FRENCH AND THE SOCIETY ISLANDS.**—The Journal of Commerce says: "Almost simultaneously with the news of the restoration of the Sandwich Islands to the native government, we have intelligence (by an arrival at New Bedford from Tahiti, June 26,) that the British Admiral Nicholas at the Society Islands has disavowed the French usurpation there established, and forbidden British subjects in those Islands from holding themselves amenable to the French authorities. This position he declares his purpose to maintain at all hazards, until the will of his sovereign shall be known; but hopes that no actual collision with the French authorities will be rendered necessary. He also speaks of being governed in his proceedings by "orders that he had received," but whether those orders emanated directly from the British Government, or from Admiral Thomas, the British commander-in-chief in the Pacific, does not distinctly appear. But in either case, the step thus taken affords a probable indication of the course which will be pursued by the British Government in reference to the French usurpation. Indeed it is stated expressly by Admiral Nicholas, that while England seeks not, and desires not, to maintain a *paramount* influence at the Society Islands, she "is determined that no other nation shall possess a greater influence or authority in those Islands, than that which, from her long and intimate connection with them, she claims as her natural right to exercise." This is plain language, and if authorized by the British Government, as it seems to be, France will find it necessary to yield, or incur the most serious responsibilities.

The United States and all other commercial nations are interested, in common with England, in maintaining the entire independence of the Society Islands, as well as the Sandwich, and we trust that our Government will not hesitate to express these views to that of France, and earnestly solicit her to abandon the exclusive jurisdiction which she has unfortunately set up.

#### LETTER FROM THE FRIGATE CONGRESS.

TRIEST, July, 1843.

We sailed from Mahon on the 8th of May, and on the 13th we came to in Toulon, one of the great depots of the French navy. In Toulon there is not much to attract the attention of travellers, but to sailors who have been tossed about on the salt sea any port suits. The inhabitants are very hospitable, and wear a cheerful countenance. During our stay I took a ride of about fifteen miles into the interior of the country, for the purpose of observing the state of agriculture, &c., all of which was in a flourishing condition. It happened that the country people were celebrating the May festivities, and they were amusing themselves in all manner of games. I also visited the Cemetery, a very beautiful place. While there we saw the procession and burial of a sailor, who had been killed by falling from aloft. In Toulon there is no theatre or opera in which a person can while away a few leisure hours. After remaining nearly a week we sailed for Leghorn, where we arrived on the 21st of May. Here, in company with several of my messmates, nine in number, chartered a couple of *vetturas*, and having provided ourselves with a guide, one who could speak English, (which is by no means common,) set out for Pisa. The distance between Leghorn and Pisa is about fifteen miles; the country is low and fertile, and on all sides, as far as the eye could reach, you behold beautiful gardens, farms, groves, &c. Near the environs of Pisa we went into a very old church, said to have been built by the Gentiles before Christ. There is a small spot in the centre of the church, with an iron grating over it, and is said to be the spot where St. Peter once stood; but I have my opinion of this matter. The principal objects of interest in Pisa, as every one knows, are the Duomo Campo Santo and Baptistery and Leaning Tower: these are all situated in the northern part of the city, and I verily believe that there is not another square in the world adorned with so rare, precious, and magnificent assembly of objects as this. As my leave only extended until sunset, I had only time to glance hastily at things as we passed along. Before entering either of the above buildings our guide conducted us to a painting gallery: here we saw many ancient paintings by the Egyptians—some known to have been executed before Christ. We saw a portrait of our Saviour, said to have been the first ever executed: it is painted upon prepared bark, and has a very ancient look. We next spent an hour in the Museum, examining many ancient curiosities. Attached to this museum is a very large botanical garden, with plants, &c., from all parts of the world. We next went to the Leaning Tower, and commenced our winding way to its summit. It is a circular building, about two hundred feet in height, and consists of eight stories, each supported by marble, granite, and other columns, twenty-six to each story, making the whole number two hundred and eight, many of the capitals of the modern ones are relics of antiquity; but what renders this tower such an object of curiosity is its extraordinary inclination, amounting to about fifteen

feet, (one half its base.) In the upper story there are seven bells, very old, and of very curious workmanship: they were brought to Pisa many hundred years ago. While we were at the top they commenced ringing the bells, and upon looking below we saw a large procession of priests, in their official robes, carrying banners and crosses: they were celebrating some festival. The view from the top of the tower is extensive and beautiful: it embraces not only every part of the city, but the whole rich plain of Pisa, watered by the classic Arno. We next went to the Cathedral: this is a very large and rich building: the ceiling is covered with gold, and upon first entering it appears to be a glare of fire. This church was built about the year 1100, and is supposed to occupy the spot where once stood the ancient palace of Adrian. I could stand all day and gaze upon the lovely paintings which are here to be seen: they are all very old, but that renders them the more interesting. Many of these were once taken to Paris by Napoleon, but were subsequently returned. In front are three large bronze doors, covered with small images of the same metal, and all representing the history of our Saviour and the Virgin Mary. We next went to the Baptistry, or Church of St. John the Baptist: this was erected about one hundred years after the Cathedral: it is a large rotunda, and the sound of a person's voice as he sounds a musical note is echoed back as if it were a concealed organ. In the middle of the building is a very large fount, where all baptizing is done. We last went to the Campo Santo, or Cemetery. It is called Campo Santo because the ground on which it is erected was brought from the Holy Land: it is on this account held in the highest veneration by all true Catholics. The building is a vast parallelogram, about two hundred and twenty-two Italian feet in length (one hundred and eighty-five English feet) and seventy-five in breadth; it has two entrances, both on the south side; the interior is a vast gallery, eighteen feet in width and five hundred and seventy-eight feet in circumference, enclosing a green cloister, covered with green grass; the pavement of the gallery is of white marble, and the number of sepulchres underneath upwards of six hundred; the walls are covered with fresco paintings, all several hundred years old: the great number of ancient antiquities there collected furnish for the antiquary a wide field of observation, conjecture, and speculation. The population of Pisa is about 20,000—it was once 100,000: the principal street is the Lung Arno, running parallel with the river of the same name. The scene here about sunset is magnificent—the classic waters beneath your feet, the marble bridges which connect the two parts of the city, the spacious and splendid edifices which line the streets, and last, but not least, the multitudes of fair Pisans, who have walked out to inhale the balmy breath of evening, and whose graceful forms are seen lightly tripping over the pavements, all combine to form one of the most gratifying and animating spectacles it is possible to imagine. We all, after seeing all Pisa, set out for Leghorn, where, upon our arrival, we felt little curiosity to see it. We only visited the tombs of

Tobias Smollet and Francis Horner, and returned aboard, much pleased with our trip.

After a passage of five days we arrived in Naples, and the next day we made up a party for the purpose of visiting Pompeii and Herculaneum; the first place we visited was the grotto of Pausilipo; it is cut through a hill of the same name, and is nearly a third of a mile in length; it is always kept lighted, for, though there are several apertures, they do not render lights unnecessary; it is very damp and disagreeable, and I was glad enough to get again in fresh air. Near this grotto is the tomb of Virgil: it stands in the midst of a vineyard and about half a mile from the beach. Nothing remains at present but a small building, flat roofed, but vaulted within, with two modern windows; it is entirely destitute of ornaments of any kind. When we returned to Naples it was near night, and we accordingly concluded to go to the opera, where we remained until eleven o'clock, when we turned in, got two hours sleep, turned out, got into a carriage and drove for Resina, a town at the foot of Vesuvius, and where we procure horses for our journey up the Mount. At Resina we shifted ourselves, putting on old boots, pants, etc., which we had brought for that purpose: we mounted our horses, and commenced our weary journey to the summit of the Mount; the distance we have to ride is about three miles, through a very rough road cut entirely from lava. On our way we stopped at the Hermitage, where we rested a short time, inscribed our names in his books, and rode some distance farther, dismounted, and, leaving our horses in charge of a soldier, commenced, staff in hand, to foot it to the top of the Mount, where we arrived in about an hour and a half. The top is one vast level plain, in the middle of which is the crater, and at intervals of a few seconds you hear noise like distant thunder. The ground upon which we stood was very hot; we dug a small hole and put in a few eggs, and in a few minutes they were cooked hard. The crater is about one mile in circumference, and about three hundred feet deep, and on all sides there are thousands of small columns of smoke issuing from among the rocks of lava and sulphur beds. Two of our party would not descend, but one of them and myself ventured down, and we were amply repaid for our trouble. There is a small cone through which the fire, smoke, and lava comes. This cone is about forty feet high. To the top of this we went, disregarding the infernal noise and grumbling of his imaginary majesty. We went to within six inches of the edge, and watched our chance, and just as he had burst out, we looked over into the burning crater, and saw the burning lava, which every few minutes is thrown up. We did not stay there more than three minutes, for the smell of the sulphur is so strong as to cause one to faint. As a preventive, we took a bottle of *Lachryma Christo*, with which I drank the health of my friends in Washington. We returned and found our two companions asleep under some rocks. After resting a few minutes we descended on another part of the mountain, and where the ashes are knee deep. We went down in the twinkling of an eye, mounted our



horses and rode again to Resina. On our way back we had splendid scenery, all the magnificent Bay of Naples with its islands. We dismounted at our hotel, shifted ourselves, got into our carriage and drove off for Pompeii, the city of the dead. We entered the city near the barracks, where we met the guide who was to show us the lions of the place. He would not let us even pick up a stone from the earth, to bear away as a memento, so Argus-like did he guard the treasure committed to his care; but in spite of his watchfulness we got to windward of him, and came off with several specimens from various houses. We had not time to examine the antiquities very minutely, but just sufficient to give a slight idea. In fact, there is very little there to be seen except the houses, all utensils and every thing valuable having been removed to the Museum at Naples. The streets of Pompeii are paved, and in many places you will still see the marks of wheels, and, at cafés, marks are left upon the counters of cups. We passed through the Temples of Hercules, Fortune, and Venus, and the Appian way, also the amphitheatre. The houses are most all of one story and flat roofs, and the floors are of beautiful Mosaic work. We went into the house of Sallust, and the house of Diomedé; in the cellar of this house we saw numerous wine jars, all in a good state of preservation. Pompeii was not destroyed by lava, but by very fine ashes or cinders, and from what I can learn it must have been destroyed very suddenly; for, on excavating, skeletons were found with bags of money and jewels in their hands, and soldiers at the city gates in armor.

From Pompeii we went to Herculaneum; this city is seventy-nine feet below the surface of the earth, and was destroyed by lava; I only went into one building; that was a theatre. As soon as this place is excavated they are immediately filled up, as there is now another town built upon Herculaneum.

After visiting every thing worth seeing in Naples we returned aboard, and several days after we got under weigh for Messina. It happened that the day we got under weigh, the Neapolitan fleet, consisting of one 74, six frigates, and two corvettes, unmoored and got under weigh at the same time. It seems that the King of Naples is a sailor, and he had one of these frigates in which he always amused himself exercising the whole squadron: this frigate is a very fast sailer, a crack ship, nothing ever beat her. We made sail at the same time as they did. We were anchored to the leeward of them, which, of course brought them to windward of us; on the first tack we went ahead of the head ship, and on the second tack we went to windward of the whole squadron. After a passage of three days we arrived at Messina: there is nothing worth seeing; it is a very dirty place, and is only noted for its excellent fruit. We remained here three days, and then got under weigh for this place, where we arrived after a passage of twelve days. Trieste is a beautiful place, it is exceedingly clean, and belongs to the Austrian Government. Our consul here has given us several large balls. On July 4th we gave a grand ball on board, which was very numerously attended. It looked very strange to the citizens to see our ball room

decked off so very fine. We run all the quarter deck guns forward, and that gave us plenty room for dancing, &c. On June 30th, a party was made up for the purpose of going to Venice. We left Trieste at night, and at 6 o'clock next morning we were in Venice. Venice was once a very rich city, but is now fast falling to decay. There are many fine palaces, all situated on the grand canal. In these palaces I saw some of the most lovely pictures that were ever beheld. Very few nobles now reside in Venice; what few that do, are so poor that their only means of subsistence is the small amount given to the porters by strangers who visit the houses. Still they will not sell their palaces, nor will they do any manner of work. You can go all over Venice by water; canals run all over the city. The houses are all built in the water, and the gondolas are the greatest things that ever were invented. We went through the ducal palace, crossed the bridge of sighs that Byron speaks of: "I stood in Venice on the bridge of sighs, a palace and a prison on each hand." We went all over the rooms of the inquisitors, the Council of Ten, saw the various instruments of tortures, palaces of the Doges. We visited the gallery of fine arts, St. Mark's church. Went under and over the Rialto; after remaining three days we returned to Trieste, where we have been enjoying ourselves very much. Our minister is at the court of Venice. Dan Jenifer is at present here, and has visited us several times, gave us a dinner, &c., and to day, (July 7th,) he came on board and had all of our officers in our cabin and read us a letter that he had written to Commodore Morris, testifying the good feelings that exist between the inhabitants and the officers, and efficiency of our ship. We sail to-morrow for Athens. From Athens we go to Smyrna, Jaffa, Tripoli, Malta, Algiers, and Mahon, where we will probably arrive in October.

**A PASS THROUGH THE ROCKY MOUNTAINS.**—The popular idea regarding the Rocky Mountains is a lofty, vast, continuous mass of rocks, partially covered with soil, on which impenetrable forests find root and sustenance. Recent explorations, directed by Government, have elicited the gratifying fact that there is a pass in the mountains, which makes the transit perfectly easy. The survey has been conducted by Lieut. Fremont, of the army, and an abstract of his report appears in the *St. Louis Missourian*, from which the following is an extract:

"About six miles from our encampment brought us to the summit. The ascent had been so gradual, that, with all the intimate knowledge possessed by Carson, who had made this country his home for seventeen years, we were obliged to watch very closely to find the place at which we had reached the culminating point. This was between two low hills, rising on either hand fifty or sixty feet. When I looked back at them from the spot of the immediate slope on the western plain, their summits appeared to be about one hundred and twenty feet above. From the impression on my mind at this time, and subsequently on our return, I should compare the elevation which we surmounted immediately at the

pass to the ascent of the Capitol Hill from the Avenue at Washington. It is difficult for me to fix positively the breadth of this pass. From the broken ground where it commences, at the foot of the Wind River chain, the view to the southeast is over a champaign country, broken at the distance of nineteen miles by the Table Rock, which, with the other isolated hills in its vicinity, seems to stand on a comparative plain. This I judged to be its termination, the right recovering its rugged character with the Table Rock. It will be seen that it in no manner resembles the places to which the term is commonly applied, nothing of the gorge-like character and winding ascents of the Alleghany passes in America, nothing of the great St. Bernard, and Simplon passes in Europe. Approaching it from the mouth of the Sweet Water, a sandy plain, one hundred and twenty miles long, conducts, by a gradual and regular ascent, to the summit, about seven thousand feet above the sea; and the traveller, without being reminded of any change by toilsome ascents, suddenly finds himself on the waters which flow to the Pacific ocean. By the route we had travelled the distance from Fort Laramie is three hundred and twenty miles, or nine hundred and fifty from the mouth of the Kansas."

The pass thus described was ascertained by Lieut. Fremont to be thirty miles within the territory of the United States. Its latitude is  $42^{\circ} 27' 15''$ . It is nearly in a direct line from the north western angle of Missouri to the Columbia river valley. Comparatively, the approach to the pass is also free from obstacles, being with the course of a small river called the Sweet Water. These and the more particular statements in Lieut. Fremont's report are very satisfactory.

**NEW PUMPING MACHINE.**—We mentioned a few days ago that a mode of pumping a ship by the capstan had been invented by Mr. David Gay, of Bath, Maine. The editor of the Boston Journal, who has examined a model of the machine, says:

It is a very ingenious and simple contrivance, which must work well in a leaky ship, and promises to be of great utility. By applying this principle, which a great quantity of water can be delivered with but little labor, and that labor by no means of a fatiguing character. And indeed a plan has been perfected by Mr. Gay, which, he assures us, has been successfully and practically tested, that will keep the pumps in operation by the mere motion of the ship. Commodore Nicolson, whose opinion relating to subjects connected with the mechanic arts, especially in their application to ships, is entitled to great respect, says, after carefully examining the model, that from its simplicity and little expense attending its application to the capstan, it must be a valuable improvement on board our mercantile marine.

**ARRIVAL OF A FRENCH MAN-OF-WAR.**—The French man-of-war frigate *Gazelle*, Commander Collier, arrived at Baltimore on Saturday last, from St. Thomas. Whilst passing Fort McHenry, she run up the American flag and fired a salute, which was returned by a salute from the Fort.

Maximum variation of the needle, Sept. 25, 18 h. 20 m., m. Göttingen time,  $1^{\circ} 36' 23'' 80$ .  
Minimum, " " 26, 13 h. 30 s., " "  $1^{\circ} 24' 05'' 00$   
Mean variation for the week, " "  $1^{\circ} 30' 16'' 15$ .

Maximum variation of the needle, " "  $1^{\circ} 35' 45'' 8$ .  
Minimum, " "  $1^{\circ} 29' 41'' 8$ .  
Mean variation for the week, " "  $1^{\circ} 31' 51'' 6$ .

# HYDROGRAPHICAL OFFICE. WEATHER JOURNAL FOR THE WEEK ENDING SATURDAY, SEPTEMBER 30, 1843.

DAYS.	Barometer.	THERMOMETERS.					WEATHER.	Portion cloudy.	WIND.	Force.	Rain inches.
		Attach.	Sun.	Rad.	Shade.	W. Bulb.					
Monday, 3 A. M.	30.986	70°	64°	60°	72.5°	69°	Clear.	0	Calm.	Air.	
Do., 3 P. M.	30.880	85	106	100	87	76	Cumulus.	0	SE.		
Tuesday, 3 A. M.	30.840	81.5°	65	66	73	66	"	0	Calm.		
Do., 3 P. M.	30.868	77	64	67	69	65	Rain.	1.0	West.	Fresh.	0.270
Wednesday, 3 A. M.	30.116	72	47	49	54.5	48	Nimbus.	1.0	North.	Mod.	0.886
Do., 3 P. M.	30.314	65	71	70	58	49	Cirrus.	0	NW.		
Thursday, 3 A. M.	30.314	64	36	39	44.5	41	Cirrus.	0	Calm.		
Do., 3 P. M.	30.272	62.5	65	68	69.5	54	Nimbus.	0.1	SE.	Light.	
Friday, 3 A. M.	30.230	65.5	80	80	64	52	Cirrus.	0.1	Calm.	Light.	
Do., 3 P. M.	30.234	64	98	107	67	59	"	0.2	East.	Light.	
Saturday, 3 A. M.	30.238	72	47	48	53.5	50	"	0.3	Calm.		
Do., 3 P. M.	30.212	63	65	64	55	50	Nimbus.	1.0	NE.	Light.	

# HYDROGRAPHICAL OFFICE. WEATHER JOURNAL FOR THE WEEK ENDING SATURDAY, OCTOBER 7, 1843.

DAYS.	Barometer.	THERMOMETERS.					WEATHER.	Portion cloudy.	WIND.	Force.	Rain inches.
		Attach.	Sun.	Rad.	Shade.	W. Bulb.					
Monday, 3 A. M.	29.842	71°	67°	63°	68°	64°	Nimbus.	0	Calm.	Light.	
Do., 3 P. M.	29.801	71.5°	106	103	70.5°	62	Clear.	0	West.		
Tuesday, 3 A. M.	29.812	71.5	56	57	60	57	Nimbus.	1.0	South.	Mod.	
Do., 3 P. M.	29.796	67.5	86	84	65.5	50	Cirrus.	0.3	NW.	Light.	
Wednesday, 3 A. M.	29.886	65.5	43	43	51.5	44	Clear.	0	"	Fresh.	
Do., 3 P. M.	29.938	65.5	82	95	63.5	49	Cumulus.	0.5	Calm.		
Thursday, 3 A. M.	30.084	66	39	39	49	43	Clear.	0	SW.	Light.	
Do., 3 P. M.	30.120	65.5	96	108	68	56	Clear.	0	SW.	Light.	
Friday, 3 A. M.	30.110	69	41	42	48	45	Foggy.	0	Calm.		
Do., 3 P. M.	30.086	69	88	95	72.5	62	Cumulus.	0.2	NE.	Light.	
Saturday, 3 A. M.	29.846	67	59	59	62	59	Nimbus.	0.2	Calm.		
Do., 3 P. M.	29.886	74	84	89	76.5	69	Cumulus.	0.8	South.	Light.	0.20



## WASHINGTON.

THURSDAY, OCTOBER 26, 1843.

The remainder of the term of suspension of Commodore ELLIOTT has been remitted by the President of the United States. Commodore E. is therefore restored to service, and awaiting orders.

Lieut. ADDISON R. TALIAFERRO has been tried by court martial, at Norfolk, and sentenced to be cashiered. Approved, October 20.

### DISCHARGE AT THE NAVY YARDS.

The circumstances under which the workmen at the Navy Yard in Washington and elsewhere were discharged last week, are explained in the following letter from the Secretary of the Navy:

WASHINGTON, October 21, 1843.

DEAR SIR: I notice a call for a meeting in Baltimore for Monday evening, "to express their views in relation to the dismissal, by John Tyler, of the Whig Mechanics who were employed in the public service at Washington, because they dared to exercise the right of freemen on Monday last, in the city of Baltimore, their place of residence, by voting their sentiments."

The order for the discharge of the workmen engaged upon the "increase and repair" of the Navy, not only at the Washington Yard, but for the discharge of all those employed in the like service in all the Navy Yards of the United States, was given by me, without instructions from the President, and in fact without his knowledge. It was rendered necessary in consequence of having exhausted the appropriation made by the last Congress, for this branch of the public service. I neither knew the politics, the residence, nor even the persons of those upon whom the order was to operate. I did not know, nor had I ever heard, that any of them had voted in Baltimore.

The workmen discharged at the Washington Yard perfectly well understood the cause of this order; and at a very large meeting of this respectable body of citizens, held on Friday evening, they unanimously passed a series of resolutions, a copy of which I send you for publication, which breathe a very different spirit from that which is shown in the call of the Baltimore meeting.

It gave me infinite pain to be obliged to discharge from employment so many industrious and worthy citizens, at this season, when winter is so near at hand; but I had no alternative: The money which Congress had thought sufficient to be expended for this purpose had been all used, and here the law required me to stop.

I trust this explanation, which I desire you will have the kindness to cause to be published, will satisfy the gentlemen who have called the Baltimore meeting, that they have moved under a misapprehension of the fact in the case.

I am, very respectfully, your ob't serv't,

DAVID HENSHAW.

[The preamble and first of the resolutions adopted at the meeting of the working men of the Washington Navy Yard, alluded to in the foregoing letter, are as follow:]

"Whereas, an order has just emanated from the Navy Department, requiring the immediate discharge of several hundred working men from this Navy Yard: Therefore, be it resolved unanimously, that from what we have been informed, we discover in said order the finger of necessity; the appropriations for the increase and repairs of the Navy having been exhausted. We, therefore, attach no blame whatever to His Excellency, the President, or to the Hon. Secretary of the Navy."

**GREAT DISCHARGE OF WORKMEN FROM THE GOSPORT NAVY YARD.**—We learn that orders were received on Saturday from Washington, by the commandant of the navy-yard at this station, to discharge all the mechanics and laborers, except so many as are required to complete some small unfinished business. This is an unfortunate state of things, both for the Government and the discharged men. There is much work to be done in the yard, which, if delayed, will thereby cost the Government as much as it would take to keep all the men who have been discharged in pay till the next appropriation is made; while the mechanics and laborers, poor fellows, are left with their scanty resources to struggle through a long and dreary winter, many of them without the prospect of getting a day's work in the interim. And why is it so? Plainly because the appropriations have been improvidently and imprudently applied, until what was drawn for twelve months has been exhausted in eight. Misgovernment and mal-administration are the causes of this deplorable state of things. It is a cruel blow to the men, and the more unfeeling on the part of the power that has inflicted it, in view of the fact that it has fallen upon the men without a moment's warning. Thirty, or even twenty days, notice that their services would be dispensed with at a given time, would have been charity to many of them; and such a notice might, we should think, have been given as well as not in anticipation, if things were rightly managed by those who are at the head of the Government.—*Norfolk Herald*.

**FROM THE PACIFIC, U. S. SHIP DALE.**—The U. S. sloop of war Dale, Commander Dornin, arrived at Philadelphia on Thursday from Valparaiso, having on board the remains of the late Commodore Claxton. A letter from an officer on board, published in the Ledger, says:

This ship has just arrived from a three years' cruise to the Pacific ocean, last from Valparaiso, from whence we took our departure on the 1st, and from the Island of Juan Fernandez on the 6th of August. The officers and crew are generally in good health, and have fortunately enjoyed an exemption from any prevalent disease during the entire three years. During the three years, we have traversed the ocean some sixty thousand miles.

**Pacific Squadron.**—The frigate "United States," Captain Armstrong, the flag-ship of Commodore Jones, sailed from Callao about the 20th of June,

bound to the Sandwich Islands, where she would probably be joined by the sloop of war *Cyane*, Commander Stribling, from the coast of California. This movement of Commodore Jones is presumed to have been induced by the sudden departure from Valparaiso of the British Admiral Thomas, in the *razer* *Dublin*, for the same destination, on his receiving intelligence of the seizure of those islands, and the deposition of their King, by Capt. Lord George Paulet, commanding the English frigate *Carysford*.

The U. S. schooner *Shark*, Lieut. Commandant Henry Eagle, was at Callao 20th June; but the U. S. store ship *Relief*, Lieut. Commandant Isaac S. Sterrett, had not yet reached there from Mazatlan, and Acapulco, having touched at the last named port for the purpose of conveying a United States messenger thence to Lima. The U. S. store-ship *Erie*, from the United States, via Rio de Janeiro, sailed from Valparaiso for Callao on the 10th July. We left Mazatlan 1st June, and made a very good run of 47 days to Valparaiso.

Commodore Dallas, the new Commander of the Pacific squadron, had not reached Lima 20th June.

Commodore Claxton's remains have been brought home in the *Dale*. It will be recollected that he died on board his flag-ship, the frigate *Constitution*, while at Talcahuano, in Chili, in March, 1841. On the occurrence of this melancholy event, Capt. Turner immediately proceeded with the frigate to Valparaiso, where the corpse was interred in the Protestant Cemetery. At the desire of the widow of the deceased, the Hon. the Secretary of the Navy, sent out instructions authorizing any of our homeward bound vessels of war to convey the remains to the United States. The commander of the *Dale* using the discretion thus vested in him, determined to give effect to the benevolent intentions of the Department in this respect; and causing the remains of the late Commodore to be exhumed from the cemetery just previously to our departure, had them suitably inclosed, conveyed on board the ship, and brought home, subject to the disposal of the family and friends.

Two French frigates, the *Danae* of fifty-four guns, and *Meurthe* of thirty-two, were in the port of Valparaiso when we sailed, with some 700 or 800 troops on board, destined to garrison and colonize the Marquesas and other Islands in the Pacific, of which the French have taken possession.

Eben R. Dorr, Esq., the new consul for Valparaiso, arrived in the store-ship *Erie*, and having obtained his *exequatur* from Santiago, entered upon the duties of his appointment.

*Officers of the Dale.*—Thos. A. Dornin, Esq., Commander; Jno. M. Berrien, Dominick Lynch, and T. M. Brasher, Lieutenants; N. C. Barrabino, Surgeon; Philo White, Purser; Jno. L. Worden, Acting Master; Jno. Thornley, Ass't Surgeon; S. P. Carter, C. Terret, W. H. Smith, L. Beard, W. F. Davidson, L. M. Mason, R. Patton, and H. C. Hunter, Midshipmen; Isaac L. Given, Captain's Clerk; R. Simpson, Boatswain; H. Lindsay, Carpenter; Geo. Thomas, Sailmaker; W. Bright, Gunner; J. Alexander, Purser's Steward.

#### TRIAL OF SPEED BETWEEN THE GREAT WESTERN AND THE U. S. STEAMER PRINCETON.

The New York Courier gives the following account of the trial of speed which came off on Thursday last, in the harbor of New York, and resulted so triumphantly in favor of American science and mechanical skill:

*The U. S. steam-frigate Princeton and the Great Western.*—The rumor that the new frigate *Princeton* would go to sea yesterday in company with the *Great Western*, drew an immense concourse of people to the battery.

During the whole morning the *Princeton* had been moving about the harbor instead of coming to an anchor, for the reason, as we understood, that if she anchored, she would necessarily come under the command of the officer in command of the station. The wind was blowing a *little gale* from the northwest; and it was a very curious spectacle to see a large ship, with her sails all furled, moving about in the very teeth of the wind and tide, without a sail set, or the appearance of paddle-wheels, steam-pipes, and the other usual evidences of being propelled by steam power.

She is propelled, as our readers are aware, by Erickson's propeller, fixed in her stern, and far below the surface of the water; while her engine is placed upon her keel near the stern, and the top of it *ten feet* below her water line!

She is of course, an experiment; and constructed under the immediate superintendence of Captain Stockton, to test the practicability of moving steam vessels of war by means of this new application of motive power. If successful, all the objections to the employment of steam in naval warfare, are obviated at once; and of course, great anxiety has been felt by all who are familiar with the subject, in the result of this experiment.

Those who were admitted into the secrets of her performances from the Capes of the Delaware to this port, confidently predicted that she would make with ease twelve knots an hour; and while this was very naturally doubted, all who felt an interest in the subject of steam navigation, most anxiously desired that she might realize the most sanguine expectations of those immediately interested in the result.

At about quarter to three o'clock, the *Great Western* came down the East river, and when about south of the battery, to the astonishment of every spectator, all her sails were set; at the same time she was blowing off steam at a rate we never witnessed before in any steamer. The truth is, she had used extra materials for creating steam for this occasion, and made double the quantity she could work. When we discovered this and saw all her lower sails set to run before a smart breeze from the northwest, we despaired of the *Princeton* accomplishing much in the way of a race without also setting her sails. But those in charge of her knew too well her power and speed to resort to any such means of obtaining the victory; and when the *Great Western* had got about a quarter of a mile the start, the *Princeton* made after at full speed. She passed the battery at a race-horse



pace, moving as if by magic; and three cheers showed that the spectators had now but little doubt of the result of the chase. Both ships headed direct for Quarantine, the Princeton passing to windward, and evidently overhauling the chase, hand over hand. The Western added sail after sail aloft, as she run before the wind; but it was evidently a hopeless matter; and when the two ships headed for the Narrows the Western appeared to be a half a mile to the southward, and the Princeton far to the westward of her.

Up to this time both ships had been running directly from the spectators, and it was difficult, except to a practised eye, to judge of their relative positions. Now, however, they were running with their broadsides sufficiently to the Battery to perceive the relative speed of each, and to the astonishment and delight of all, the Princeton gained rapidly upon, overhauled, and passed the Great Western, without showing an inch of canvas, and then commenced setting sail, and, as near as we could judge, looking through a glass, literally walked away from her.

In one word, the applicability of the *propeller* to steamers of every class is no longer an experiment; and we should here add, that the anxiety and delight manifested by the spectators in the success of the Princeton had nothing *national or local* in it, but had its origin solely in the desire to witness the triumph of what is justly considered the most important experiment in steam navigation that has been attempted since the days of Fulton.

The New York Commercial Advertiser adds:

It is but justice to state that so far as the Great Western is concerned there could be no concerted race between the two vessels. It is contrary to the express orders of the company by whom the vessel is owned, and the agents here positively deny that any preparation was made by Captain Hosken to test the sailing qualities of the vessel which he commanded with those of the Princeton.

Since the above was written we have been furnished with the following copy of a letter written by Captain Hosken, and received by the pilot who safely conducted the Great Western to sea:

FOUR P. M., OCTOBER 19, 1843.

MY DEAR SIR: I have very great pleasure in stating to you the fact of the Great Western being fairly passed by the Princeton, at from a half to three-quarters of a mile per hour; the Great Western going near nine knots and a half. It is true that the Great Western is deep in the water, rather more so than usual; still, it convinces me, and will, I think, the public also, that our iron ship, the Great Britain, will to a moral certainty surpass every steam-ship that has gone before her. In great haste, yours, &c.,

JAMES HOSKEN.

RICHARD IRVIN, Esq.

From the *Madisonian*.

We publish the official report made by Capt. Stockton to the Secretary of the Navy, of the trial of speed made between the Princeton and the British steamer Great Western. The result was such as to make it a proud day for Capt. Stockton, and the country proud of having such a son. The Great Western

has long been a favorite vessel on both sides of the Atlantic, and took precedence with the public over all the ocean steamers for speed, skilful command, &c. The act of challenging a vessel with such an established character to a trial of powers with one which was still in a measure but an untried experiment, was an act of daring which few would have ventured on, and none who are not actuated by that noble spirit of chivalry for which Captain Stockton is so eminently distinguished.

There is not any thing whatever new, but only improvements in the arts, as applied to ship building, machinery, and steam power. The model of the Princeton is said to be as perfect as any thing that ever floated on the water. Every one who sees her, is struck with admiration at her perfect symmetry and graceful appearance. The machinery is said to be of the most perfect character, in design as well as in finish. The ship, the machinery, and every thing connected therewith, has been originated by, and constructed and executed under the immediate superintendence of Captain Stockton. To him belongs all the credit of success, and the renown which it sheds on the country, for these extraordinary improvements in the arts; as, in the event of a failure, he would have been obliged to have borne all the odium consequent thereto. This, after the expectation of the public had been elevated to the highest point, would not have been either light or measured. Captain Stockton's professional as well as scientific reputation was staked in the result of the experiment. Thus far he has succeeded, and triumphed far beyond, it appears to us, what his most sanguine expectations could have ever anticipated. In this he reaps a rich reward. The country, which he has long gallantly served, derives the benefits.

This is not all. The armament and its character are yet to be spoken of: two wrought iron guns of greater weight than history gives any account of having ever before been forged; the smaller one, thirteen or fourteen feet long, and carrying a ball weighing 240 pounds; the larger, sixteen feet long, and carrying a greater weight of metal; these, also, the original invention of Captain Stockton. The experiments that have already been made, prove, we understand, that these guns discharge a ball with the accuracy of a rifle, and with most terrific effect. The union of these tremendous engines of destruction with steam power, by which the ship can be propelled either backward or forward, and against wind, tide, or current, will lead to an entire change in the mode of naval warfare. A greater change in character will be wrought before ten years shall have passed over, we venture to predict, than that produced in the mode of travel since the application by Fulton, of steam power to propelling boats and locomotives.

The name of Stockton is destined, in all future time, to adorn the pages of history as a splendid contributor to the glory of his country, by the improvements in science and the arts, for which she is so eminently indebted to his public spirit and brilliant genius; that name will also stand among the highest of those who are destined hereafter to occupy a niche in the temple of fame. Brave, prompt, energetic,

generous, kind, benevolent, and chivalric, the country rejoices in having, and offers homage to such a son.

U. S. STEAMSHIP PRINCETON,  
PHILADELPHIA, October 21, 1843.

SIR: I have the honor to inform you that I left the Delaware on Tuesday the 17th instant, to try the Princeton at sea, and returned to this place last night to finish her equipment. The Princeton has performed so well, under all circumstances, that too much cannot be said in praise of her. We arrived at Sandy Hook on Wednesday, in 21½ hours from New-castle. We went up to the city of New York, to show ourselves, and to give notice to the Captain of the English Steamer Great Western that I designed to have a trial of speed with that vessel.

On Thursday the Western came out of the East river, and the trial took place, from the Battery to the sea, in which we gained a most glorious triumph, in the presence of many thousands of our fellow citizens, assembled to witness the useful and exciting contest. The following account, which was made at the time by two gentlemen who came on board for that purpose, I prefer to send you rather than trust my own pen on the subject. You will allow me, however, to add that the Princeton is now admitted to be the fastest and most beautiful, as she will hereafter be admitted to be the most formidable ship afloat:

At 38 minutes past 2 o'clock, P. M., whilst the Princeton was lying in the North river, the Great Western was seen passing off the Battery, under a full head of steam, blowing off strong, and with her fore and aft sails set, the wind blowing fresh from the westward. The Princeton immediately started her engine, gave chase, and coming up astern of the Great Western, soon passed with no sails set, and the yards square. The Western then set her square sails, and the Princeton following her example, made sail also, and continued to widen the gap between the two vessels. When the Princeton arrived at the Buoy of the middle below the Narrows, she was more than a mile ahead of the Great Western. Here the latter ship, to make good the distance she had lost, took the "Swash Channel," which is three miles shorter than the ordinary ship channel, which the Princeton had taken before she was aware of the intention of the Great Western. Notwithstanding the greater distance she had passed over, she met the Western again at the Black Buoy on the Outer Bar, and there passed under her stern about two lengths distant, then hauled up on a line parallel to her. When coming alongside Captain Stockton wished Captain Hosken a pleasant passage, and the crew of the Princeton gave the Western three cheers. The Princeton then rapidly passed ahead of the Western, in two minutes crossed her bow, and then hauled up for the Capes of the Delaware.

From the time that the Princeton passed Castle Garden till she finally left the Great Western, was one hour and fifty-six minutes, during which time she had beaten her three miles.

Your obedient and faithful servant,

R. F. STOCKTON.

Hon. DAVID HENSHAW, Secretary of the Navy.

## ARMY.

Major L. Thomas, Asst. Adjut. Gen., and Captain G. G. Waggaman, Com. Sub., have been detached to investigate militia claims, growing out of service of militia, in the Territory of Florida.

Brevet 2d Lieut. D. H. Hill, 1st arty., transferred, for the benefit of his health, to company K. 3d artillery, stationed at Oglethorpe Barracks, Savannah.

## NAVY.

Oct.

### ORDERS.

18—Lieut. John P. Gillis, P. Mid. Henry Clemson, Mid. C. Dyer, jr., S. P. Quackenbush, R. W. Shufeldt, H. K. Stevens, A. F. Warley, J. C. P. De Krafft, and Paul Shirley, frigate Raritan.

19—Lieut. Henry French, ordinary, navy-yard, Portsmouth, N. H.

P. Mid. F. Alexander, rendezvous, Norfolk.

Mid. E. Vanderhost, frigate Cumberland.

Mid. Joseph Fry, sloop Boston.

Gunner Wm. Burton, receiving-ship, Boston.

21—Lieut. J. D. Johnston, receiving-ship, Norfolk.

Surgeon J. M. Foltz, frigate Raritan.

P. Ass't Sur. D. Harlan, detached from frigate Savannah.

P. Mid. D. McN. Fairfax, depot of charts.

23—Leave of absence for three months to the officers of sloop Dale.

P. Mid. R. A. Knapp, detached from sloop Warren, on account of ill health, with two months leave.

Mid. H. C. Hunter, leave one month, and then to frigate Raritan.

24—Capt. C. W. Skinner, order to command of frigate Potomac, revoked.

1st Ass't Engineer J. Alexander and 2d Ass't Engineer J. S. Rutherford, ship Princeton.

P. Mid. C. Ap R. Jones, brig Perry.

Prof. E. C. Ward, frigate Raritan.

## Naval Intelligence.

### U. S. VESSEL OF WAR REPORTED.

HOME SQUADRON.—Brig *Boxer*, Lieut. Commanding Bullus, was at Havana, on the 3d inst. The *Boxer* left Cienfuegos, on the 13th ult., visited the Isle of Pines, and cruised along its southern and western coast, among the keys and banks in that neighborhood, but fell in with no suspicious vessels. She put into Havana on the 2d inst., to land her pilot, and would proceed immediately to Pensacola. Officers and crew all well.

## Revenue Service.

Oct.

### ORDERS.

19—Capt. Polk, order to Eastport countermanded, and ordered to the Duane, at Mobile.

Capt. Whitcomb, to remain at Eastport until further orders.

## Marriages.

At Henderson, Ky., on the 12th instant, Capt. P. N. BARBOUR, U. S. army, to Miss MARTHA ISABELLA, youngest daughter of J. B. HOPKINS, Esq., of that place. (Intelligencer please copy.)

In New York, on Tuesday, 17th instant, Major WASHINGTON SEAWELL, U. S. army, to SUSAN AMELIA, youngest daughter of the late JOHN M. BLOOM, Esq.

On the 19th instant, Lieut. ROBERT E. JOHNSON, U. S. navy, to ANNIE T., daughter of JOSEPH P. NORRIS, of Philadelphia.